

Welcome to our 2023 season weekly issue of our UF/IFAS Extension Suwannee Valley Watermelon Crop Update. These updates will be summarized by Bob Hochmuth, Regional Specialized Extension Agent- Vegetable Crops, with input from Suwannee Valley Extension Agents: Mark Warren (Levy), Tyler Pittman (Gilchrist), Tatiana Sanchez (Alachua), Luke Harlow (Bradford), Jay Capasso (Columbia), Dan Fenneman (Madison), Keith Wynn (Hamilton), Emily Beach (Lafayette), Jim Devalerio (Union), De'Anthony Price (Jefferson), Bob Hochmuth (for vacant Suwannee position), Kevin Athearn (RSA- Agri- business), and Sudeep Sidhu (RSA- Water Resources).

If you know someone who wants to be added to this weekly notice, contact your Extension Agent or Mark Warren (352-949-8288) if you want to be added to the regional watermelon group text app.

We have initiated a more formal way to support our watermelon growers with a rapid diagnostics system through Suwannee Valley Regional and County Extension Agents. This industry-funded program allows Extension Agents to submit and pay for watermelon grower's plant disease and other diagnostic samples. This SV Rapid Diagnostic Watermelon Program will help us to get quicker diagnostic results, helping to give early alerts to everyone, and not have to charge the growers directly. **Sponsors of this program in 2023 to date include Harrell's, TriEst Ag, Gowan USA, and Syngenta Crop Protection.** Those reps interested in sponsoring can contact Bob Hochmuth at bobhoch@ufl.edu or 386-288-6301.

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Reminder: Two watermelon field days are now planned for the Suwannee Valley region, one on Monday, April 10th at Whitehurst Cattle Company in Williston and the other on Thursday, April 20th at UF/IFAS NFREC-Suwannee Valley. See the information below for details.

Twilight On-Farm Watermelon Field Day- Controlled Release Fertilizer Project, CRF and Irrigation Management, and Grafted Watermelon Research Update

Monday, April 10th, 2023

Presented by the UF/IFAS Suwannee Valley Watermelon Extension Team

Location: Whitehurst Cattle Company, 20551 NE 75th Street, Williston, FL 32696

5:30 PM — Registration Opens

6:00 PM — Welcome

6:05 PM — **2023 Controlled Release Fertilizer Project (7 watermelon and 3 corn farms): What we have learned, linking fertilizer and irrigation management.** Bob Hochmuth, UF/IFAS

NFREC Suwannee Valley, Mark Warren, UF/IFAS Levy County Extension, and Sudeep Sidhu, UF/IFAS NFREC-SV.

Irrigation Automation. Tyler Pittman, Gilchrist County Extension.

Update on Watermelon Grafting Projects, Tatiana Sanchez, UF/IFAS Alachua County Extension.

7:00 PM — **Dinner, Sponsored by Mayo Fertilizer, Pursell Agri-Tech, and Harrell's Fertilizer**

8:00 pm - Adjourn

Twilight "At-The-Research and Education Center" Watermelon Field Day- Automation of Irrigation Systems, Paper Mulch Research Update, and Fertilizer Management Programs Thursday, April 20th, 2023

Presented by the UF/IFAS Suwannee Valley Watermelon Extension Team

Location: UF/IFAS NFREC-Suwannee Valley, 8202 CR 417, Live Oak FL 32060

5:30 PM — Registration Opens

6:00 PM — Welcome
(Note: CCA and 1 Pesticide Applicator CEUs have been approved for this meeting)

6:05 PM — **Presentations and Field Tour of Research Trials.**

Automating Irrigation Systems in Vegetable Crops. Andy Voelz, Anthony Tasselli, Michael Steele, ToroAg; and Marshall Hall, Josh Freeman, TriEst Ag.

Cost Share Opportunities for Automating Irrigation Systems, Jonathan Crain, Suwannee River Water Management District.

Paper Mulch in Watermelon Production A Research Update, Fritz Paulsen, WestRock.

Florida Watermelon Association- funded Fertilizer Trial (including comparison of Traditional, Controlled Release Fertilizers, and All-liquid season-long program). Bob Hochmuth and Sydney Williams, UF/IFAS NFREC Suwannee Valley.

Insect and Disease Update. Jay Capasso Columbia County Extension and Bob Hochmuth.

7:00 PM — **Sponsored Dinner- ToroAg (Irrigation Automation, Supplies), WestRock (Paper Mulch) Comments from Florida Watermelon Association (FWA),** Laura Land, FWA Research Committee Chair.

8:00 pm - Adjourn

Weekly Updates

General Observations:

The last week was a week of rapid growth and plenty of fruit set overall. Anthony Drew and I were discussing how unusual it is to see so much fruit set this early in the season. Last week we also noted a significant increase in water demand as the fruit were setting or expanding in size. Keep a close eye on soil moisture sensors in the upcoming weeks to adjust water events as needed. (Bob Hochmuth)

We were also discussing how we need to be prepared shortly for powdery mildew preventative sprays. For me, each year, as we approach baseball to softball-sized fruit, it is time to think about initiating sprays for powdery mildew. Last year, the first confirmed case of powdery mildew was noted on April 22nd. We recommend you rotate between Quintec and Procure. This weekly rotation worked well last year when started early. Research results last year in the Suwannee Valley showed these two materials were still effective and showed low resistance levels. Switch may be another option later in the season, but we suggest you start with Quintec and Procure rotated and one or the other sprayed weekly along with your broad-spectrum fungicides (Mancozeb or Chlorothalonil). Intensify your scouting regimen now until harvest. Otherwise, fields are still very clean and disease-free, and we are still recommending cover sprays of chlorothalonil for very young plantings. (Bob Hochmuth and Mathews Paret)

Old enemy lurking in watermelon fields: We are beginning to see symptoms of Fusarium wilt in some fields. You may notice a runner or two starting to wilt, but as the season progresses, the entire plant may succumb to the disease. Mild soil temperatures are conducive for the fungus to grow so in general, conditions will remain good for pathogen growth this week (disease incidence is maximum at around 80.6-84.2F). When soil temperatures increase, conditions are no longer favorable for the pathogen, but the infection has already occurred. As the demand for water increases after fruit set, you will notice more plants exhibiting symptoms resulting from the clogging of the vascular system responsible for transporting water. If you notice plants with low vigor, wilting during the hottest parts of the day and with a grayish-green appearance you can test in the field for Fusarium (see photo below). Sample plants that exhibit these symptoms but that have the crown area intact (the area around the soil line that separates roots from above-ground growth). Avoid vines that have rolled in circles with the wind or stems affected by ants. Once you sample, cut downward through the middle of the crown and inspect the color of the vascular system (see photo below). If the plant is infected, you will notice discoloration along the vascular vessels, if healthy, it will look whitish. As you may know, there are no controls available for this disease after the crop is established. If you suspect you have Fusarium and want confirmation, reach out to your local agent to submit a sample. Check page 33 of the Watermelon Field Guide for more information. (Tatiana Sanchez-Jones)



